

Forecasts

INTRODUCTION. Ted Stevens Anchorage International Airport (ANC) is a vital part of the Alaska International Airport System (AIAS). Concurrent to this Part 150 Study Update, the Alaska International Airport System was conducting an update to the system-wide forecasts including Ted Stevens Anchorage International Airport, Lake Hood Seaplane Base and Fairbanks International Airport. Forecasts were developed for 2015, 2020, 2025, and 2030. These forecasts are presented in detail in the *Alaska International Airport System Plan Forecast Technical Report*. Because these forecasts were completed concurrent with the start of the Part 150 Study Update, it was decided to use these forecasts as a basis for the Part 150 Study to keep the Study consistent with the other planning studies.

Background

Projections of aviation demand that were developed as part of the *AIAS Forecast Technical Report* were prepared in accordance with guidance found in Federal Aviation Administration (FAA) Advisory Circular (AC) 150/5070-6B, Airport Master Plans. These forecasts were then used to provide the basis for several operational inputs into the Integrated Noise Model (INM) for this Part 150 Noise Study. The forecasts were approved by the FAA on September 13, 2012. The approval letter can be found in the **Forecast Appendix** of this Study.

In preparing a Federal Aviation Regulation (FAR) Part 150 Noise Compatibility Plan, one of the key products is the preparation of the Noise Exposure Maps (NEMs). The NEMs identify the existing and future noise exposure (typically five years into the future from the date of submission of the NEMs), and are prepared using the FAA's INM. For this case, 2009 was used as the existing base case year because it was the last full year of operations without operational changes (such as runway closures due to maintenance). This information was pulled from airport tower counts. The future base case examined will be 2020, which is approximately five years from the date of expected submission of the contours to FAA. Additionally, a 2030 scenario will be developed for planning/informational purposes only.

To prepare a noise exposure contour map for a particular year, the INM requires information concerning the number of aircraft operations, the types of aircraft (fleet mix), and the time of day (day or night) that the activity occurs. As stated above, the 2009 data was pulled from airport tower counts and flight track data. For 2020 and 2030, the methods of the forecast development can be found within the *Alaska International Airport System Plan Forecast Technical Report*. The results are summarized here with respect to those operations that provide the basis for the Part 150 Noise Compatibility Study contours (2009, 2020, and 2030).

Existing Operations and Forecasts Summary

This section presents the summary of the existing operations for the year 2009. At the onset of this study, 2009 provided the last full year of data available that represented “normal” operations, without major operational changes (such as runway closures due to maintenance). The breakdown for Ted Stevens Anchorage International Airport and Lake Hood Seaplane Base are included in Table B1 below.

Additionally, this section presents the summary of the forecasts developed in the *Alaska International Airport System Plan Forecast* for the years 2020 (Future), and 2030 (Out-Year for informational purposes). These are included in Table B1 below for reference. These operations are further broken down by aircraft type for the INM analysis.

Table B1
SUMMARY OF 2009, 2020, AND 2030 AIRCRAFT OPERATIONS BY TYPE

Year	Air Carrier Operations	Cargo Operations	Air Taxi Operations	General Aviation Operations	Military Operations	Total Operations
2009						
ANC	91,092	2,280	35,685	4,385	198,456	
LHD -	-	12,291	45,885	-	58,176	
Total	91,092	65,014	14,571	81,570	4,385	256,632
2020						
ANC	101,540	2,793	39,863	2,267	242,275	
LHD -	-	15,793	49,667	-	65,460	
Total	101,540	95,812	18,586	89,530	2,267	307,735
2030						
ANC	111,212	2,036	47,713	2,267	281,942	
LHD -	-	18,902	59,446	-	78,348	
Total	111,212	118,714	20,938	107,159	2,267	360,290

Source: 2009 data from Airport tower counts; 2020, 2030 forecasts from the Alaska International Airport System Forecast Technical Report, 2012.